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ABSTRACT

A survey was conducted of more than 300 instructional developers, asking which books they would recommend for a variety of different uses. To assist them, a listing of 139 instructional development books taken from a recent journal article was included with the survey. Participants, who represented a diverse but highly-experienced group, were asked to recommend three books for each of four categories: personal use, textbook, reference for practitioners, and for reading by nondevelopers. A list of most recommended books was developed, and demographic variables were used in the analysis of respondent recommendations. Results, though inconclusive, indicate that significant differences exist in book recommendations according to such factors as sex, age, and other demographic variables and suggest areas for further analysis and research. This report includes tables displaying data on respondents' job responsibilities, years of experience, and places of employment; the 39 most-recommended books; additional book recommendations; and topics for new books suggested by respondents. Forty references are listed. (LMM)

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BASIC REFERENCES ON INSTRUCTIONAL DEVELOPMENT

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An abridged version of this paper has been accepted for publication in Educational Technology under the title "The Most Recommended Books on Instructional Development"

ABSTRACT

This paper reports on a survey of more than 300 instructional developers who were asked which books they would recommend for a variety of different uses. To assist them, a listing of 139 ID Books taken from a recent journal article was included with the survey. The respondents represented a diverse but highly experienced group. Participants were asked to recommend three books for each of four categories: personal use, textbook, reference for practitioners, and for reading by non-developers. A list of most recommended books was developed, and demographic variables were used in the analysis of respondent recommendations.

In the past few years it has been popular to develop bibliographies of books on instructional development. However, for the most part, these bibliographies have been the result of one individual or perhaps a small group deciding arbitrarily what should or should not be included on a list. Little attempt has been made to verify the utility of these choices for users in the field.

The purpose of this study was to conduct a nationwide survey of instructional developers, asking for recommendations about the books of the field. The results were expected to reflect any consensus opinions held by the users regarding the utility of the identified literature. The very nature of the survey was expected to result in the omission of a variety of specialized resources that might be useful in certain settings. Even so, the desired results of the study were not limited to the development of a new, perhaps shorter bibliography. Instead, it was thought that much could be learned by examining the pattern of responses to questions about ID books. The authors began with high hope that the results might help to identify which ID approaches are most useful, who the conceptual leaders of the field are, and what networks among authors exist.

The field of ID is characterized by wide diversity. Some of it is the result of the settings in which ID is practiced. Some of it is the result of differences among graduate ID programs. Some of it is the result of differences among philosophical approaches to education and training. While books are only

a part of the literature on ID, they should be representative of most or all of the theoretical and conceptual ideas upon which the field is founded. This study was designed to be a first step in identifying some of the common themes and common paths of divergence that typify ID today. As such, this study anticipates the need for future analysis of the periodic literature of the field.

THE METHOD

Selecting the Sample. No one is really sure how many instructional developers there are. In fact, there is not even an agreed upon method for distinguishing between professional instructional developers (whatever "professional" means) and others in the education and training field who have adopted the ID title. Our goal was to identify survey participants who would be knowledgeable about ID literature. We also sought respondents whose claim to the instructional developer title was based upon some actual experience doing ID either full-time or part-time. To accomplish this, a sample of 306 was selected from past or present members of the Division for Instructional Development of the Association for Educational Communications and Technology. To provide a high probability that the individuals were primarily involved in some aspect of ID, address indicators such as job titles and unit names were used in selecting the sample.

Analysis of Respondents. A total of 126 responses (41.2%) were returned. Ten responses had to be discarded because they did not provide enough usable data. Of the remaining 116 survey forms, 74% were from men, 26% from women. Because the initial impetus for this study came from a perceived need to obtain user verification of a list of ID books, particular attention was given to analysis of the respondent population. Though not necessarily scientifically representative of all instructional developers, the respondents represented a diverse, highly experienced group as illustrated in Tables 1-3.

Table 1

Respondents' Job Responsibilities

(listed in declining order of frequency)

Job Responsibility	Percentage
Part-time Developer	53%
ID Instructor of Graduate Students	46%
ID Project Evaluator	38%
ID Program Administrator	34%
ID Support Service	33%
Full-time Developer	14%
ID Instructor: Industry or Government	10%
ID Instructor of Undergraduate Students	9%

Table 2

Years of Respondent Experience

	Years				
Direct ID Experience (practitioner) N = 110*	0	1-3	4-6	7-9	10+
Full-time (74)	33%	16%	19%	13%	19%
Part-time (63)	43%	20%	12%	8%	17%
Training Developers or Teaching ID N = 116					
Full-time (45)	61%	7%	11%	5%	15%
Part-time (41)	65%	16%	6%	4%	9%
ID Related Experience	16%	6%	14%	12%	51%

*All 116 respondents gave information which indicated past or present ID experience--full-time, part-time, or both. However, 6 persons did not respond directly to years of experience, and their replies were not used in these computations.

Table 3

Respondents' Places of Employment

Place of Employment	Percentage
Public College	66%
Private College	11%
Consulting firm	9%
Self-employed	8%
Industry	8%
Community or Junior College	8%
All other categories	11%

(Total exceeds 100% due to multiple responses.)

A total of 964 years of full-time or part-time ID experience was reported by 110 individuals. Similarly, 93 people reported a total of 1127 years of ID-related experience. The predominance of college staff and faculty (85%) is mirrored in the finding that the vast majority of those responding (82%) had doctoral degrees. (The low response by persons outside of academia was a disappointment.) The majority (71%) of those answering the survey had taken Educational Technology or ID coursework as a major, with courses taken at 56 colleges and universities from around the country. In spite of this heavy concentration of college faculty, experienced professionals, and Ed Tech/ID majors, one-third reported having examined or read only a little of the literature listed in the reference article, and only 10% reported having examined or read almost all of it.

To verify the geographic dispersion of subjects, the envelopes in which the questionnaires were returned were checked for postmarks. Of 108 readable postmarks from 37 states and the District of Columbia, the most were from Florida (9), Illinois (9), Texas (9), California (8), and Pennsylvania (7).

The Survey Instrument. Each of the 306 members of the sample was sent a questionnaire of 2 pages, legal size, with 17 questions (See Appendix). Half of the questionnaires were printed on green paper, half on yellow. All of the sample received the 139 item book list (Braden, 1982) which had originally been printed in Educational Technology. The half of the sample (152 persons) who received green questionnaires were also given a second list which contained names of 61 other books. Both book lists are included in the appendix.

Procedures. From each returned questionnaire 74 items of information were coded onto an optical scan sheet. The coded opscan sheets were then read into a computer data base and an initial tabulation was run to determine which demographic questions had elicited response patterns suitable for cross-break analysis of respondent book recommendations. The 16 most frequently recommended books were also identified and were used thereafter in the statistical analysis.

RESULTS

Supplementary Book List. Whether a supplementary book list was included with the questionnaire and basic book list made no difference in response rate (64 for both lists vs. 62 for basic list only). However, eight of the ten responses that were unusable because insufficient data was furnished came from subjects who received only the basic book list.

Book Recommendations. Each participant in the survey was asked to recommend three books from the Braden article for each of four categories: personal use, textbook, reference for practicing developers, and reading for a client not knowledgeable about ID. One or more votes were cast for 94 of the books on the list of 139. Main results of the selection aspect of the survey are shown in Table 4.

Table 4

The Most Recommended Books

Author & Short Title	Rank by Number of Recommendations				
	Own	Text	Reference	Client	Overall
AECT. Educational Technology: Glossary.	-	-	10	-	-
Bloom. A Taxonomy of Educational Objectives.	8	-	5	-	10
Briggs. Instructional Design.	4	3	7	6	3
Briggs & Wager. Handbook of Procedures.	-	5	6	9	7
Davies. Competency Based Learning.	-	-	-	10	-
Davis, Alexander, & Yelon. Learning System Design.	7	6	-	5	8
Diamond. Instructional Development for Individualized Learning.	-	10	-	8	-
Dick & Carey. The Systematic Design of Instruction.	9	2	-	4	6
Fleming & Levie. Instructional Message Design.	3	7	2	-	4
Gagné. The Conditions of Learning.	2	4	3	7	2
Gagné & Briggs. Principles of Instructional Design.	1	1	1	3	1
Heinich. Technology and the Management of Instruction.	10	-	-	-	-
Hilgard & Bower. Theories of Learning.	-	-	9	-	-
Kemp. Instructional Design.	-	9	-	2	9
Mager. Preparing Instructional Objectives.	5	8	8	1	5
Travers. Second Handbook of Research on Teaching.	6	-	4	-	-

Other books recommended by 10% or more of the respondents:

AECT Task Force on Definitions and Terminology. The Definition of Educational Technology; Baker & Schutz, eds. Instructional Product Development; Banathy, Instructional Systems; Bass, Lumsden, & Dills. eds. Instructional Development: The State of the Art; Bloom, Madaus, & Hastings, Evaluation to Improve Learning; Gagné, Essentials of Learning for Instruction; Merrill, ed., Instructional Design: Readings; Merrill & Tennyson, Teaching Concepts: An Instructional Design Guide; Postlethwait & Associates, Exploring Teaching Alternatives; Salomon, Interaction of Media, Cognition, and Learning; Snelbecker, Learning Theory, Instructional Theory, and Psychoeducational Design; Wittich & Schuller, Instructional Technology: Its Nature and Use (Sixth Edition).

There is much duplication in selection from category to category. The top ten choices in all four categories are covered by only 16 books. An additional 13 books were recommended for one or more categories by 10% or more of the respondents. Of these 29 highly selected books, four were in the top ten for all categories: Principles of Instructional Design by Gagné & Briggs, The Conditions of Learning by Gagné, Instructional Design edited by Briggs, and Handbook of Procedures for the Design of Instruction by Briggs & Wager. The dominant influence of Gagné & Briggs is hard to ignore, with their book Principles of Instructional Design recommended as a textbook by over 40% of all respondents. This was the highest agreement on any recommendation in the survey.

In addition to the list of 139 books included in the survey, respondents were given an opportunity to list other books that would be appropriate for a basic ID reference shelf. A total of 99 other books were named. Table 5 lists the most frequently recommended.

Table 5

Additional Book Recommendations

Gerlach & Ely. Teaching and Media.

Gilbert. Human Competence.

Hartley. Designing Instructional Text.

Heinich, Molenda, & Russell. Instructional Media & The New Technologies of Instruction.

Jonassen. The Technology of Text.

Kemp. Planning & Producing Audio-Visual Materials.

Mager. Goal Analysis.

Markle. Designs for Instructional Designers.

Romiszowski. Designing Instructional Systems.

Wileman. Exercises in Visual Thinking.

Book Deletions. Another aspect of the study was to identify books that were no longer appropriate for a basic ID reference shelf. Reasons for such a deletion might involve age, topic, cost, readability, etc. Of the 139 books on the survey list, 81 received at least one nomination for deletion. A few of the negative expressions were strongly stated. However, no clear cut case emerged for deleting any book from the list, though seven did receive more recommendations for deletion than for inclusion as one of the top three in a category. An additional 26 books received neither recommendations as a top book nor recommendations for deletion.

Topics for New Books. In addition to making judgements about specific books in the ID field, the respondents were asked to indicate topics about which they would like to see new books published. The results are shown in Table 6 and suggest that the individuals who responded to this survey have a greater interest in the application of learning theory and other research findings than in procedures and strategies for doing ID. Keep in mind, however, that college faculty made up the majority of participants in the survey. Research and theory are topics which one would expect to be of greater interest to academics than to instructional developers.

Table 6

Topics for New Books

Topic	Rank	Responses
Applying Learning Theory to ID	1	54%
Research Related to ID	2	45%
Designing Instructional Strategies	3	31%
Practical ID Tips	4	29%
ID for Business and Industry	5	28%
Front-end Analysis	6	27%
Formative Evaluation	7	25%
Designing Instructional Material	8	21%
Teaching Instructional Evaluation	9	17%
ID (General)	10	14%

Observations. The survey generated an extensive data bank of significant and non-significant facts which offer innumerable tidbits of information that will be useful in further studies of the literature and its relationship to the field of instructional development. For example:

- Men were significantly more apt to select Principles of Instructional Design (Gagné & Briggs) for personal use and as a reference than women (43% vs. 17% and 22% vs. 10%).
- Women were almost twice as likely as men to recommend The Conditions of Learning (Gagné) as a text (24% vs. 13%). Men, however, recommended it twice as often as women to give to clients (13% vs. 7%) and three times as often as a reference (23% vs. 7%).
- Men were significantly more apt than women to select Instructional Design (Briggs) as a text (22% vs. 3%).
- Respondents who majored in Ed Tech or ID were more than twice as likely as all others to select Instructional Message Design (Fleming & Levie) as a reference (22% vs. 9%).
- Only 8% of college level developers selected Preparing Instructional Objectives (Mager) as a book to own for personal use as compared with 31% of all others. Those under 40 years old recommended it for clients twice as often as those over 40 (31% vs. 15%).

DISCUSSION

The initial analysis of the data from this survey can hardly explain why significant differences exist for such factors as sex, age, and other variables. It does suggest areas for further analysis and future research. Not surprisingly, additional analysis will be needed to synthesize what the recommended books say about the actual practice of ID and to identify the invisible networks that provide the theoretical and conceptual framework upon which the practice of ID

is based. The rather limited agreement on the top books should not be taken to imply that the field should be based on such a limited foundation.

A number of indications from this study suggest that most developers have a relatively narrow perspective and limited experience with the variety of literature available. The majority of the 16 books most recommended are more than seven years old. While a wide range of responses was expected and, in fact, did occur with 193 different books receiving at least one recommendation, it seems surprising that so few received recommendations from several persons. (Only 63 books were recommended by four or more people).

While the results of this survey are hardly conclusive, they do raise some disturbing questions about instructional development and how far the field has come as a profession. Has the field become so specialized that each developer truly has unique literature needs? Is there a failure to base the practice of ID on a solid theoretical foundation as chronicled in the books of the field? Is ID an art developed almost entirely through personal experience? It seems unlikely that these questions have affirmative answers, but that is one way of interpreting these findings. Other reactions would be to conclude that it is too early to judge the literature of the ID field or that <u>any</u> agreement about the literature (and there was some) is an important step for an evolving profession. Certainly, the 39 most recommended books as revealed by this survey are all excellent (see references). Taken as a whole they represent a fundamental and growing core of basic literature for instructional development.

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